

REMARKS

This Application has been carefully reviewed in light of the Office Action mailed July 12, 2004 (the "Office Action"). At the time of the Office Action, Claims 1-37 were pending in the Application. Applicant amends Claims 1, 12, 18, 21, and 37. Reconsideration and favorable action are requested.

Examiner Interview

Applicant notes with appreciation the telephone conference conducted on October 7, 2004 between Examiner Cheryl M. Fernandes and Applicant's representative, Charles Suh (Reg. No. 52,259). During the telephone conference, Examiner Fernandes agreed to withdraw the enablement rejections of Claims 1-7, 21-23, 34, 37, and 18-20.

Objection to the Specification

The Office Action objects to the specification of the present Application for the stated reason that it fails to provide proper antecedent basis under M.P.E.P. §608.01(o) for the limitations of "determining a threshold usage value" and "determining an actual usage value." More specifically, the Office Action asserts that "the specification fails to define usage values in terms of actual and threshold values." Office Action, ¶1. Applicant respectfully traverses this rejection.

M.P.E.P. §608.01(o) requires that the meaning of every term used in any of the claims should be apparent from the descriptive portion of the specification with clear disclosure as to its import. M.P.E.P. §608.01(o). Applicant respectfully submits that the respective meanings of limitations "determining a threshold usage value" and "determining an actual usage value" are apparent from the descriptive portion of the current specification. For example, see page 17, lines 11-13, which refers to method 300 shown in FIGURE 3 as one example method for implementing a **usage-based** taxonomy. Also, Claim 3, which is a part of the specification, states that the "level of access value for each node comprises usage of information content associated with each node." Page 9, line 31 through page 10, line 3 states, "The initial **threshold values** may be provided as a set of default settings based, for example, on the size of the taxonomy or ontology and a projected number of accesses that may be made (e.g., information imported from a predecessor application or created manually)." [emphasis added]. Additionally, page 10, line 28 states, "For example, a value for a level of access to a

node may include information about **the actual** retrieval of the node" [emphasis added]. See also page 8, lines 20-28, page 9, lines 11-17, page 9, line 29-page 10, line 5, and page 10, line 19-page 11, line 2 of the specification. In light of these and other portions of the current specification, Applicant respectfully submits that the current specification provides antecedent basis of the identified claim limitations, and that the objection to the specification should be withdrawn. Favorable action is requested.

Section 101 Rejections

The Office Action rejects Claim 1-37 under 35 U.S.C. § 101 for the stated reason that the claimed invention is directed to non-statutory subject matter. The Examiner appears to assert that the rejected claims are directed to "a mathematical modeling technique, which is an abstract idea, without needing for physical computing equipment and therefore constitutes non-statutory subject matter." Office Action, ¶3. Applicant respectfully submits that this is incorrect. Applicant notes that the Office Action has failed to use the correct legal standard for supporting a section 101 rejection.

35 U.S.C. §101 states that "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title." In interpreting 35 U.S.C. §101, the Federal Circuit has stated that the claimed invention must produce a "useful, concrete and tangible results." *State Street Bank & Trust Co. v. Signature Financial Group Inc.*, 47 USPQ 2d 1596, 1601-02 (Fed. Cir. 1998). "Only when the claim is devoid of any limitation to a practical application in the technological arts should it be rejected under 35 U.S.C. 101." M.P.E.P. §2106. Applicant respectfully submits that each of Claims 1-37 as originally filed produces a useful, concrete or tangible result, and none of such claims is devoid of any limitation to a practical application in the technological arts. However, to advance the prosecution of this case, Applicant amends Claims 1, 18, 21, and 37 as suggested by the Examiner. Reconsideration and favor action is requested.

Section 112 Rejections

The Office Action rejects Claims 1-7, 21-23, 34, and 37 under the first paragraph of 35 U.S.C. §112 for the stated reason that the specification, while being enabling for determining a threshold access value, "does not reasonably provide enablement for

determining a level of access value." See Office Action, ¶7. The Office Action rejects Claim 12 under the first paragraph of 35 U.S.C. §112 for the stated reason that the specification, while being enabling for frequently used access devices that influence levels of access, "does not reasonably provide enablement for a sum of different devices' Ids computed for a predetermined interval of time." *Id.*, ¶8. The Office Action also rejects Claims 18-20 under the first paragraph of 35 U.S.C. §112 for the stated reason that the specification, while being enabling for usage values, "does not reasonably provide enablement for 'threshold usage' and 'actual usage' values." *Id.*, ¶9.

As indicated above in the "Examiner Interview" section, the Examiner has agreed to withdraw the enablement rejections of Claims 1-7, 21-23, 34, 37, and 18-20. Claim 12 has been amended, and thus this rejection is moot. Favorable action is requested.

The Office Action rejects Claims 1-37 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Referring to Claims 1, 21, 24, and 37, the Office Action states that "[i]t is unclear as to whether the 'level of access' refers to an 'actual access' value or an 'average access' value." *Id.* ¶11. In some embodiments, both "actual" and "average" access values are covered by the phrase "level of access value." For example, see page 11, lines 25-32, and FIGURES 2A and 2B. Thus, the identified limitation of "the level of access" is not indefinite, and the §112 rejection of Claims 1, 21, 24, and 37 should be withdrawn. Favorable action is requested.

The Office Action rejects Claim 18 for the stated reason that the limitation of merging a first node with a related 'lateral' node is unclear, because the claimed dynamic taxonomy "does not claim to have a hierarchical structure." *Id.* ¶12. The Office Action further asserts that a taxonomy structure "is required in order to have a lateral node present." *Id.* Applicant disagrees with this assertion because lateral nodes may be present where only one level exists. For example, two nodes in a single level structure may be considered lateral nodes within the single level. Thus, there is no confusion concerning the meaning of the term "lateral node," and the rejection of Claim 18 should be withdrawn. Favorable action is requested.

The Office Action rejects Claim 18 under §112 also for the stated reason that "a threshold usage value" for a node and "an actual usage value" for a node are "not provided for in the specification and therefore render the limitations to be unclear." *Id.*, ¶13. Applicant

respectfully disagrees, and submits that the plain meaning of these terms within the context of the invention sufficiently communicates to one skilled in the art the metes and bounds of Claim 18. For example, in some embodiments, "an actual usage value" of a node refers to a value that indicates the actual usage of a node. *See, e.g.* Specification, page 11, lines 25-32 and FIGURE 2A, where the "Actual Access" values shown in FIGURE 2A are referred to as one of the "usage values." Favorable action is requested.

Section 102 Rejections

The Office Action rejects Claims 18 and 21 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,742,003 B2 issued to Heckerman et al. ("*Heckerman*"). Applicant respectfully traverses these rejections for reasons provided below.

Claim 18 is allowable because *Heckerman* does not teach or suggest "comparing said actual usage value for a first node . . . with said threshold usage value for said first node . . . and **if said actual usage value for said first node is less than said threshold usage value for said first node**, merging said first node with a related lateral node," [emphasis added] as recited by Claim 18. The Office Action asserts that column 9, lines 13-17, column 10, lines 5-25, FIGURE 2E, column 5, lines 34-41, column 7, lines 31-60, column 22, lines 1-15, FIGURE 15, and column 25, lines 28-67 show this limitation. *See* Office Action, ¶16. This is incorrect. Although these identified portions of *Heckerman* disclose combining two nodes when **a similarity value** of one node is sufficiently close to **a similarity value** of **another node**,¹ neither they nor any other portion of *Heckerman* disclose, teach or suggest merging a first node with a related lateral node if **the actual usage value for the first node** is less than the **threshold usage value for the first node**. For example, column 8, lines 11-51 of *Heckerman* describe how categories of "ie support" and "windows support" are connected using an arc 206 because their respective numbers of records are sufficiently similar, but

¹ For example, column 9, lines 13-17 shows an adjustment of a similarity threshold that is to be used for deciding whether two nodes are similar enough to combine into one node. Column 10, lines 5-25 and FIGURE 2E shows a CV system that combines categories that are most similar into a single category. Column 5, lines 34-41 essentially states that an embodiment of the invention of *Heckerman* "automatically and dynamically changes the hierarchy based on similarity measures." Column 7, lines 31-60 generally describes combining and splitting categories based on their similarities. Column 22, lines 1-15 generally describes merging segment groups and a segment viewer 1500 - shown in FIGURE 15. Column 25, lines 28-67 describes a cluster hierarchy generation process 1520 and a mathematical determination of the level of similarity between each pair of segments. However, none of these identified portions of *Heckerman* constitutes a showing of this missing limitation of Claim 18.

categories of "ie support and "enterprise" are not connected because their respective numbers of records are not sufficiently similar (i.e. below the similarity threshold.) Thus, according to *Heckerman*, the decision to combine two categories is made by comparing a value from one category to a value from another category, as opposed to one embodiment of the claimed limitation which compares two values of the same node. Further, the *Heckerman* invention would combine categories when the compared values are exactly equal, because a smaller level of difference between the compared values increases the likelihood that the categories will be combined. Such a disclosure does not constitute a showing of merging a first node with another node if the value indicating actual usage of the first node is less than a threshold usage value of the same first node. Thus, Claim 18 is allowable. Favorable action is requested.

Claim 21 is allowable for reasons analogous to those provided in conjunction with Claim 18. Favorable action is requested.

As depending from allowable independent Claims 18 and 21, dependent Claims 19-20 and 22-23 are also allowable. Favorable action is requested.

Section 103 Rejections

The Office Action rejects the following claims under 35 U.S.C. §103(a) for the following reasons:

Claims 19 and 22 are unpatentable over *Heckerman* in view of U.S. Patent No. 5,701,467 issued to Freeston ("*Freeston*");

Claims 20 and 23 are unpatentable over *Heckerman* in view of U.S. Patent No. 6,631,496 B1 issued to Li ("*Li*");

Claims 1, 24, and 37 are unpatentable over *Heckerman* in view of *Freeston* and further in view of *Li*;

Claims 4 and 26 are unpatentable over *Heckerman* in view of *Freeston*, in view of *Li*, and further in view of U.S. Patent Number 6,470,344 B1 issued to Kothuri et al ("*Kothuri*");

Claims 10, 11, 12, and 32 are unpatentable over *Heckerman* in view of *Freeston*, in view of *Li*, and further in view of U.S. Publication Number 2002/0083067 A1 by Tamayo et al ("*Tamayo*");

Claims 14 and 34 are unpatentable over *Heckerman* in view of *Freeston*, in view of *Li*, and further in view of U.S. Patent Number 5,950,173 issued to Perkowski ("*Perkowski*");

Claims 15 and 35 are unpatentable over *Heckerman* in view of *Freeston*, in view of *Li*, and further in view of U.S. Patent Number 6,055,515 issued to Consentino ("*Consentino*");

Claims 16 and 36 are unpatentable over *Heckerman* in view of *Freeston*, in view of *Li*, and further in view of U.S. Patent Number 6,243,750 B1 issued to Verma ("*Verma*");

Claim 17 is unpatentable over *Heckerman* in view of *Freeston*, in view of *Li*, and further in view of U.S. Publication Number 2003/0059029 A1 issued to Mengshoel et al. ("*Mengshoel*").

Claims 1, 24, and 37 are allowable for reasons analogous to those provided in conjunction with Claim 18. For example, Claim 1 is allowable because *Heckerman* does not teach or suggest "comparing said level of access value for a first node . . . with said threshold access value for said first node . . . and if said level of access value for said first node is less than said threshold access value for said first node, merging said first node with a related node arranged laterally to said first node in said hierarchical arrangement," as recited by Claim 1. Neither *Freestone* nor *Li* show this missing limitation, and the Office Action does not assert that they do. Favorable action is requested.

As depending from allowable independent Claims 1 and 24, dependent Claims 2-17 and 24-36 are also allowable. Favorable action is requested.

CONCLUSION

Applicant has made an earnest attempt to place this case in condition for allowance. For the foregoing reasons, and for other reasons clearly apparent, Applicant respectfully requests full allowance of all pending claims.

If the present application is not allowed and/or if one or more of the rejections is maintained, Applicant hereby requests a telephone conference with the Examiner and further request that the Examiner contact Charles H. Suh, Attorney for Applicant, at the Examiner's convenience at (214) 953-6457 to schedule the telephone conference.

Applicant believes no additional fees are due. However, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,
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